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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10

1200 Sixth Avenue, Suite 900  
Seattle, Washington 98101-3140

November 4, 2008

Mr. Robert Wyatt  
Northwest Natural & Chairman, Lower Willamette Group  
220 Northwest Second Avenue  
Portland, Oregon 97209

Re: EPA's Comments on Table 5.1-2 of the Comprehensive Round 2 Site Characterization Summary and Data Gaps Analysis Report, February 21, 2007

Dear Mr. Wyatt:

On January 15, 2008, the U.S. Environmental Protection Agency (EPA) commented on the "*Comprehensive Round 2 Site Characterization Summary and Data Gaps Analysis Report*" dated February 21, 2007. In particular, EPA commented on Section 5 (*Identification of Sources*) and Table 5.1-2. The Lower Willamette Group (LWG) responded to EPA's comments on Table 5.1-2 (Comments 127-175) in an email dated July 25, 2008. Enclosed are EPA's comments to the LWG's July 25, 2008, email.

In addition to EPA comments regarding specific upland facilities, this letter presents EPA's suggested revised presentation format for the LWG to use to portray upland source information in the draft Remedial Investigation (RI) report. Given that information about sources of contamination to the river continually evolves, presenting pathway information in this manner and detail represents a snapshot in time of presently available information. Consequently, information presented in the revised Table will likely change in the future. The text of the RI Report and this table must state clearly that the information presented is based on information known as of September 2008, and that information regarding contaminants or the status of a specific pathway may change and that new current or historical contaminant migration pathways may be discovered in the future. Further, it should be noted that this table is not amenable to describing general information about historic sources of contaminants that may not be identified with a specific property.

EPA has worked closely with the Oregon Department of Environmental Quality (DEQ) to ensure that the comments are consistent with DEQ upland project managers' assessment of the site and the September 2008 version of the Joint Source Control Strategy (JSCS) Milestone Report. As stated above, EPA is recommending modification of the overall format of the table. As a result, many of the comments and responses will be affected by this format and may supersede EPA's original comments and/or our specific comments on the LWG's July 25, 2008 response. It may be necessary to convene a working meeting with representatives of the LWG to assist in classifying all the sites and pathways for the draft RI report; please contact us to set up this meeting.

If you have any questions regarding this letter, please contact Chip Humphrey at (503) 326-2678 or [humphrey.chip@epa.gov](mailto:humphrey.chip@epa.gov), Eric Blischke at (503) 326-4006 or

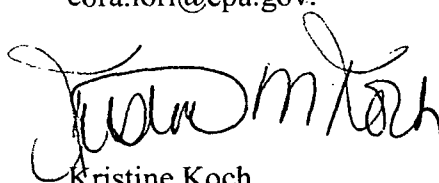
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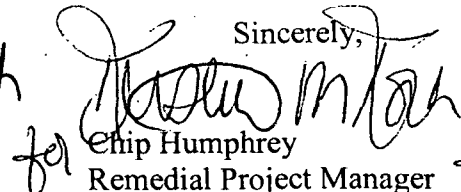
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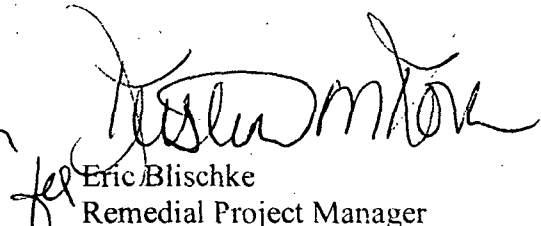
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blischke.eric@epa.gov, or Kristine Koch at (206) 553-6705 or koch.kristine@epa.gov, or have your attorney contact Lori Cora, Assistant Regional Counsel, at (206) 553-1115 or cora.lori@epa.gov.

  
Kristine Koch  
Remedial Project Manager

Sincerely,

 for  
Chip Humphrey  
Remedial Project Manager

 for  
Eric Blischke  
Remedial Project Manager

Enclosure

cc: See Distribution List

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### General Comments regarding Revised Presentation Format

EPA has further considered how to most effectively portray an understanding of upland sources and transport pathways and how they may have changed over time or may change in the future. We have determined the format of the Table 5.1-2 of the Round 2 report should be modified. EPA's recommended table modifications are presented as follows:

- 1) The revised Table, footnotes, and any discussion should clearly state that the pathways are **Contaminant Migration Pathways** with the assumption that a complete contaminant migration pathway is only complete when the pathway is complete (e.g., a stormwater connection that discharges to the river via outfall) and there are contaminants of interest (COIs) associated with the pathway. The table should also depict potential future sources (e.g., current groundwater plumes that do not reach the river but may in the future if not controlled). Such sources should be designated as potential contaminant migration pathways.
- 2) EPA understands that the description of the historical release may be different from the current release based on different upland activities, ownership or control of upland sources. Consequently, the revised Table should present information on both the known current and likely historic contaminant transport pathways independently for each site (source) listed on the table.
- 3) EPA does not agree with the H\* designator presented by the LWG in their response. The Current Overwater Pathway should be viewed as regular overwater activities or overwater structures that have the potential to release contaminants to the river. EPA recommends the LWG consider the types of current overwater structures, activities, and safety controls (e.g., BMPs, SPCC, containment, etc.) at sites and describe the current status and potential threat to the river. Historical overwater sources should be classified as "H" when there is some evidence that there were potential historical overwater releases (e.g., potential historical overwater contaminant migration pathway, b).
- 4) The information portrayed in the table should reflect the current understanding of the contaminant transport pathway rather than the release. For example: There is currently a groundwater plume reaching the river that was the result of a historic release from an UST at a site. Both the historic and current pathways for groundwater would be represented as "a" in the table. However, if the source area (i.e., the contaminated soil from the UST release) has been cleaned up and the contaminant migration pathway was eliminated through treatment, control, or achieving acceptable levels (i.e., risk levels or applicable and relevant or appropriate requirements -ARARs) at the river bank, then the groundwater pathway could be represented as "d."
- 5) The Table presented in the Round 2 Report only presents upland sites that are currently in DEQ's cleanup program for source control. However, additional sources that have the potential to affect the Portland Harbor site have been identified and should be presented in the table (e.g., Portland General Electric Substation L, PPL, Zidell, Ross Island, City of Portland outfalls, potential Albina district sources, etc.).

6) When a pathway is not applicable to a site (e.g., a site will not have riverbank erosion pathway if it is not adjacent to the river) it should be noted as not applicable (N/A) rather than leaving it blank.

7) An assessment of the potential for groundwater contamination at sites without groundwater data should be presented in the revised Table. The groundwater contaminant migration pathway should be designated as incomplete, d, if site information suggests that subsurface releases were unlikely. Further, sites without groundwater data and for which subsurface releases impacting groundwater are possible should be designated as insufficient information, c.

8) The City of Portland Combined Sewer Outfalls (CSOs) and stormwater outfalls should be included in the revised Table.

9) Please add the following disclaimer to the bottom of the table: "The information contained in this table, particularly information judging whether a source or pathway is historic or current, former versus existing, complete or incomplete, is based on information as of September 2008. New information about historic and ongoing sources and pathways may be discovered in the future and the status of a pathway for any particular site likely will change over time."

#### **Comments on the LWG's 7/25/08 Response/Recommendations**

##### **COMMENT 123 - ACF INDUSTRIES**

###### **EPA 01/15/08 Comments:**

Groundwater: Change pathway designation to c [currently d]

Stormwater/Wastewater: Change pathway designation to b [currently a] and H,C [currently H]

###### **LWG Discussion:**

Groundwater: The January 2008 JSCS Milestone report (Table 1) (JSCS) notes that groundwater is currently "insignificant pathway, no action recommended". The 2005 Site Summary (section 10.2.4) states that "DEQ has indicated that the ACF groundwater plumes have been adequately characterized" and "DEQ has indicated that impacted groundwater at the site is not likely to be a current source of contaminants to the Willamette River."

Stormwater/Wastewater: The JSCS notes that the stormwater "source control complete" implies a likely historic pathway, but not current. The 2005 Site Summary (section 10.3.7) indicates that stormwater discharges indirectly to the Willamette River and that the potential for current contamination migration in stormwater is insignificant.

###### **LWG Recommendations:**

Groundwater: Pathway should remain as 'd', due to JSCS and Site Summary conclusions.

Stormwater/Wastewater: Pathway should be changed to b and H, due to the JSCS and Site Summary conclusion that the potential for current contamination migration is insignificant.

**Joint EPA and DEQ Response:**

Groundwater: EPA and DEQ agree that the groundwater contaminant migration pathway is currently incomplete. However, the historic wastewater pond potentially discharged to the river via groundwater. Consequently the historical groundwater pathway should be listed as potentially complete (b) or insufficient information (c).

Stormwater/Wastewater: EPA and DEQ recommend that the stormwater contaminant migration pathway be designated as historically complete, but agree that it is currently incomplete.

Based upon these comments and the revised format EPA recommended above, EPA and DEQ recommend the releases from the ACF property be depicted as:

Historic Groundwater Pathway – “c” or “b”

Current Groundwater Pathway – “d”

Historic Stormwater – “a” or “b”

Current Stormwater – “d”

Historic Wastewater Pathway – N/A

Current Wastewater Pathway – N/A

Historic Overland Transport – “d”

Current Overland Transport – “d”

Historic Riverbank Erosion – N/A

Current Riverbank Erosion – N/A

Historic Overwater Release – N/A

Current Overwater Release – N/A

**COMMENT 124 - ARKEMA**

**EPA 01/15/08 Comments:**

Stormwater/Wastewater: Pathway should be designated as H, C [currently H].

Overland Transport: Change pathway complete designation to likely complete (b) [currently insufficient data to make determination (c)].

Riverbank Erosion: COIs should also include VOCs, SVOCs and other [currently pesticides/herbicides, PCBs].

**LWG Discussion:**

Stormwater/Wastewater: The January 2008 JSCS Milestone report (Table 1) notes that stormwater "failed screening levels, alternative evaluation in progress" The Site Summary notes DDT>DEQ WQC in Section 10.3.3.

Overland transport: JSCS lists this pathway as "N/A", the Site Summary says stormwater not infiltrating is discharged through the permitted stormwater system and that sheet flow is not an applicable process (Section 1).

Riverbank Erosion: JSCS notes that riverbank soils exceed action levels but analytes are not listed. There is no discussion in the Site Summary of VOCs, SVOCs or Other in riverbank soils (Section 10.1.2).

### **LWG Recommendations:**

Stormwater/Wastewater: Stormwater currently meets discharge limitations. Pathway will remain Historic only.

Overland Transport: Pathway will remain as c—insufficient data to make determination.

Riverbank Erosion: Pesticides/herbicides and metals have been retained as the only COIs. VOCs were not detected in recent riverbank samples, and SVOCs were detected infrequently, and there are no SVOC sources in the riverbank so SVOC should not be a COI. PCBs were never listed as a COI in the original table.

### **Joint EPA and DEQ Response:**

Stormwater/Wastewater: EPA and DEQ disagree with the LWG recommendation for stormwater, but agree that the current wastewater pathway is not complete. The stormwater pathway is currently complete; contaminant concentrations (e.g., DDX and PCBs) in stormwater exceed JSCS screening level values (SLVs). Arkema has completed a draft FFS for stormwater to address current discharges; however, these have not been currently implemented.

Overland Transport: EPA and DEQ agree with the LWG recommendation for overland transport. The recently received draft Stormwater FFS noted overland runoff pathways on Lots 1 and 2; however, stormwater data has not been collected during a storm event. Because of the potential for transport of DDX and PCBs to the river from this pathway, DEQ will require this pathway to be addressed in the stormwater source control measures at the site (e.g., berm construction).

Riverbank Erosion: EPA and DEQ do not agree with the LWG recommendation. VOCs and SVOCs have been measured in the riverbank soils so they should remain a COI.

Based upon these comments and the revised format EPA recommended above, EPA and DEQ recommend the releases from the Arkema property be depicted as:

- Historic Groundwater Pathway - "a"
- Current Groundwater Pathway - "a"
- Historic Stormwater - "a"
- Current Stormwater - "a"
- Historic Wastewater Pathway - "a"

Current Wastewater Pathway – “d”  
Historic Overland Transport – “c”  
Current Overland Transport – “c”  
Historic Riverbank Erosion – “a”  
Current Riverbank Erosion – “a”  
Historic Overwater Release – “c” or “b”  
Current Overwater Release – “d”

**COMMENT 125 - BURGARD INDUSTRIAL PARK – BOYDSTUM METALS,  
PORTLAND BLAST MEDIA**

Not included in JSCS table. Discussion below based on 2005 Site Summary information.

**EPA 01/15/08 Comments:**

Stormwater/Wastewater: Change pathway to H, C [currently H]

**LWG Discussion:**

Stormwater/Wastewater: The Site Summary (Section 1.4) states that stormwater is routed to a shared storm drain system (WR-123) and that only Boydstun and Portland Blast have NPDES permits. Historically, it is noted that stormwater either infiltrated directly to the ground or evaporated.

**LWG Recommendations:**

Stormwater/Wastewater: Change pathway designation to C? due to the absence of current stormwater data in the Site Summary.

**Joint EPA and DEQ Response:**

EPA and DEQ agree with the recommendation regarding stormwater/wastewater as a current contaminant migration pathway. Regarding the stormwater/wastewater as a historic contaminant migration pathway, unless additional information can be provided that demonstrates that there was no runoff from this facility and that the facility recently connected to the storm drain system, EPA and DEQ maintain that this pathway should be H, c.

**COMMENT 127 - BURGARD INDUSTRIAL PARK – NW PIPE**

**EPA 01/15/08 Comments:**

Groundwater: Change NAPL to Y? [currently Y]

**LWG Discussion:**

Groundwater: The January 2008 JSCS Milestone report (Table 1) notes that groundwater is not a complete pathway. The 2005 Site Summary (section 10.2.2) indicates that NAPL is not present,



but that DEQ stated concern that previously detected VOC concentrations in 2 wells “suggest potential presence of DNAPL”.

**LWG Recommendations:**

Groundwater: NAPL designation shall be changed to Y? due to the uncertainty in the presence of NAPL.

**Joint EPA and DEQ Response:**

EPA and DEQ have reviewed the information available at this site and now believe that NAPL should be Y as presented in the Round 2 Report.

**COMMENT 129 - BURGARD INDUSTRIAL PARK – SCHNITZER STEEL, CALBAG METALS**

**EPA 01/15/08 Comments:**

Groundwater: COI list change to 1,4,6,7 [currently 1,4,6]

Stormwater/Wastewater: Change pathway to a [currently b]

Overwater: COI list change to 1,4,7 [currently 1,4], pathway designation change to H,C [currently H,C?]

Riverbank: COI list change to 3,4,5?,6,7 [currently 3,4,5]

**LWG Discussion:**

Groundwater: The 2005 Site Summary indicates dissolved metals were detected in groundwater samples (section 10.2.3).

Stormwater/Wastewater: The January 2008 JSCS Milestone report (Table 1) notes “ongoing monitoring” for stormwater and “waiting for SCE completion” for pathway determination. The 2005 Site Summary (section 10.3.7) indicates that “Currently, stormwater is either recycled into the shredder operation at SSI or discharged through 15 outfalls along the river and slip under an NPDES permit.” According to DEQ (Site Summary section 10.3.7) permit benchmarks for stormwater have been exceeded (oil and grease and metals).

Overwater: The 2005 Site Summary (Table 1) indicates TPH and VOCs as overwater COIs. The also indicates that overwater activities are currently being conducted and that uses may have resulted inadvertent releases of diesel, motor oils, and other contaminants to the river (section 8.2).

Riverbank Erosion: The JSCS (Table 1) notes "additional sampling needed" for SCE completion. The Site Summary notes subsurface soil samples collected along riverbank for PAH, PCB, TPH and metals analysis.

**LWG Recommendations:**

Groundwater: Agree to add '7' to COI list.

Stormwater/Wastewater: Leave pathway determination as 'b' as awaiting SCE determination.

Overwater: Leave COI list as is (no addition of metals to list) and update historic/current as H\*.

Riverbank Erosion: Update COI list as 3,4,6,7 as determined from Site Summary information (with the exception of the addition of 5? – pest/herb unless additional information is available)

**Joint EPA and DEQ Response:**

Stormwater/Wastewater: EPA and DEQ disagree with the LWG recommendation. There is sufficient data available to show that this pathway is 'a' without having the SCE determination.

Overwater: EPA and DEQ disagree with the designation H\* (see Revised Presentation Format comment #3) and maintain that metals (7) should be added to the COI list.

Riverbank Erosion: EPA and DEQ agree with the LWG recommendation.

**COMMENT 130 - CALBAG METALS – FRONT AVE.**

**EPA 01/15/08 Comments:**

Stormwater/Wastewater: Pathway designation change to H,C [currently H]

Riverbank: Pathway designation change to H,C [currently blank]

**LWG Discussion:**

Stormwater/Wastewater: JSCS notes that "source control complete" which should indicate there are no current sources. Section 8.1 of the 2005 Site Summary indicates all stormwater runoff is directed to catch basins and current BMPs in place have "shown that Calbag Metals is not a current source of Willamette River water or sediment contamination" BES (TM, February 2008) notes that based on their current investigation of OF19, this site continues to be a source of stormwater contamination.

Riverbank Erosion: The 'd' designation indicates an incomplete pathway, thus H and C do not apply. Also, the property is not adjacent to the river (Site Summary section 1.2.)

**LWG Recommendations:**

Stormwater/Wastewater: Change pathway to H, C.

Riverbank Erosion: Leave pathway blank.

**Joint EPA and DEQ Response:**

Stormwater/Wastewater: EPA and DEQ agree with the LWG recommendation; however, the current pathway should be designated as 'b' and the historical pathway should be designated as 'a'. Stormwater source control measures were implemented beginning in 2005. Post stormwater source control measure monitoring is ongoing. Although source control measures have been implemented, current data demonstrate that metals and PCBs in stormwater are still above acceptable levels from this site.

Riverbank Erosion: EPA and DEQ agree that the property is not adjacent to the river, but conclude that the pathway should be marked "N/A".

**EPA COMMENT 131 -CASCADE GENERAL (PORTLAND SHIPYARD)****EPA 01/15/08 Comments:**

Stormwater/Wastewater: COIs should also include TBTs and phthalates; pathway complete[ness] should be designated as likely complete (b) [currently (c)]; the current designation should be qualified with a question mark.

**LWG Discussion:**

Stormwater/Wastewater: JSCS Table 1 splits Stormwater into two sections, general and the N Channel Ave Fab Area. Catch basin sampling for the general area is undergoing analysis and a risk assessment work plan has been approved for the N Channel area. For both, the pathway determination is waiting on the SCE and both are identified as p Med priority levels. If recent sampling supports the additional chemicals, they should be added.

**LWG Recommendations:**

Stormwater/Wastewater: Until the SCE is complete, the COIs and pathway designation should stay as they are – 1,3,4,6,7 (c) H, C.

**Joint EPA and DEQ Response:**

EPA and DEQ disagree with the LWG proposal and maintain that the pathway designation should be "b" given the detection of metals in stormwater discharge above benchmarks. Further EPA and DEQ recommend that TBT and phthalates be added to the COI list because they were detected in catch basin solids.

## **COMMENT 132 – CITY OF PORTLAND BES**

### **EPA 01/15/08 Comments:**

Groundwater: COI list change to 4,6,7 [currently blank]. Change pathway designation to c [currently d] and H,C? [currently blank]

Stormwater/Wastewater: COI list change to 4,6,7 [currently 11].

Overwater: COI list change to 10 [currently 5].

Overland: Change pathway designation to H? [currently ?]

### **LWG Discussion:**

Groundwater: The January 2008 JSCS Milestone report (Table 1) notes that groundwater “source control complete” which should indicate that there are no current sources. Site Summary indicates no groundwater plumes.

Stormwater/Wastewater: The JSCS notes that stormwater is “ongoing” and pathway is “to be determined.” The Site Summary indicates “Stormwater collecting at the site is treated” either through an onsite stormwater treatment pond or engineered bioswales and is discharged through Outfall 50.

Overwater and Overland are listed as “NA” by JSCS. Site Summary notes there are currently no overwater activities or overland transport at the site.

### **LWG Recommendations:**

Groundwater: The groundwater pathway evaluation and source control is completed for the site. EPA changes are not recommended.

Stormwater/Wastewater: EPA changes are not recommended.

Overwater: EPA changes are not recommended. The site historically had docks; there are currently no docks at the site. The City has no knowledge of information indicating overwater releases occurred and there have been no sampling activities related to this pathway. To be consistent with the remainder of the table, the City recommends the COI column show “NS” (not sampled), the potentially complete pathway column remain “c”, and the Historic/Current Column remain as a “H”

Overland: Change to H?

**Joint EPA and DEQ Response:**

EPA and DEQ disagree with the LWG's recommendations and maintain the original comments. EPA and DEQ believe that the LWG's interpretation of the JSCS Milestone Report is inaccurate; DEQ has not initiated a source control evaluation or source control measures at the BES Water Lab site. EPA's previous comments on this AOPC were with respect to COIs in river sediments and our knowledge about the Crawford Street site. Further, the City of Portland has submitted a PA (2006) that further supports EPA's original comments. Regarding the groundwater pathway, see general comment 7.

Overwater: EPA and DEQ generally agree with the LWG recommendation. See general comment 3 regarding historical overwater activities.

**COMMENT 133 - CONSOLIDATED METCO****EPA 01/15/08 Comments:**

Groundwater: Change NAPL to N [currently Y]

Stormwater/Wastewater: Change pathway designation to H,C? [currently H,C]

**LWG Discussion:**

Groundwater: The 2005 Site Summary (section 10.2.2) indicates NAPL present ("according to DEQ, detected concentrations of diesel-range and heavy-oil range hydrocarbons in the groundwater indicate that free product was present at the time of sampling")

Stormwater/Wastewater: The January 2008 JSCS Milestone report (Table 1) notes "waiting on SCE completion" The 2005 Site Summary (section 10.3) indicates "stormwater conveyance has acted as a preferential pathway in the past". Stormwater drains through four catch basins on the site that discharge to the City of Portland conveyance system to the Willamette River. The catch basins may contain contaminants that could be discharged to the river using the City of Portland conveyance system as a preferential pathway.

**LWG Recommendations:**

Groundwater: Leave NAPL as 'Y' unless there is additional information available.

Stormwater/Wastewater: Stormwater is currently discharging to the river, leave as 'H,C' as there is a potential for the pathway to exist as described in the Site Summary.

**Joint EPA and DEQ Response:**

Groundwater: EPA and DEQ agree with the LWG recommendation.

Stormwater/Wastewater: EPA and DEQ agree with the LWG recommendation.

## **COMMENT 134 - EXXON MOBIL OIL TERMINAL (PART OF NUSTAR SITE)**

### **EPA 01/15/08 Comments:**

Groundwater: Change pathway designation to H,C? [currently H,C]

Overwater: Change pathway to b [currently c]

### **LWG Discussion:**

Groundwater: The January 2008 JSCS Milestone report (Table 1) notes that groundwater is a "complete pathway" indicating it is a current source. The Site Summary update (2007) indicates groundwater monitoring is ongoing and that dissolved contaminant plumes are present, but that the plume characterization is incomplete (section 10.2).

Overwater: The JSCS (Table 1) notes that "there are no known current spills (reported to OERS)." The 2005 Site Summary (section 8.3) lists 3 spills to the river (2003-2004 as reported in the DEQ ERIS dbase). The dock is currently being used therefore there is a potential for additional spills.

### **LWG Recommendations:**

Groundwater: Change pathway designation to H,C? as current data was not available during Site Summary development.

Overwater: Agree, update pathway to 'b' [currently c] as there have been spills reported and the dock is in operation. Although there were no EPA recommendations to change Historic/Current, it has been modified to H\*, indicating that the facility had a historic overwater pathway, and there are current overwater operations, but there are no current overwater impacts.

### **Joint EPA and DEQ Response:**

Groundwater: EPA and DEQ currently recommend retaining the Round 2 Report pathway designation of H,C. EPA and DEQ believe that groundwater plume discharges to the river is both historical and current. DEQ is working with Exxon Mobil and NuStar to address this discharge.

Overwater: EPA and DEQ do not agree with the H\* designation (see Revised Presentation Format comment #3) and acknowledge that the pathway was likely complete historically (H, b). The current pathway would need to be evaluated per EPA's Revised Presentation Format comment #3.

## **COMMENT 135 - FRED DEVINE DIVING AND SALVAGE**

### **EPA 01/15/08 Comments:**

Stormwater/Wastewater: Change pathway to b [currently c]

### **LWG Discussion:**

Stormwater/Wastewater: The January 2008 JSCS Milestone report (Table 1) notes that stormwater is "ongoing" and "waiting on SCE to be completed." The 2005 Site Summary (section 1.4) states that site is drained through six catch basins that discharge through OF M1. Catch basin sediments data show PAHs, phthalates, metals exceeding SLVs (and in river sediment). In section 8.1 the "DEQ determined that the stormwater system and overland drainage were the two most significant contaminant migration pathways at the site"

### **LWG Recommendations:**

Stormwater/Wastewater: Site Summary information supports update of pathway from 'c' to 'b'

Overwater: Although there were no EPA recommendations to change this pathway, it has been modified to H\*, indicating that the facility had a historic overwater pathway, and there are current overwater operations, but there are no current overwater impacts.

### **Joint EPA and DEQ Response:**

Stormwater/Wastewater: EPA and DEQ agree with the LWG recommendation.

Overwater: EPA and DEQ do not agree with the "H\*" designation (see Revised Presentation Format comment #3). The overwater pathway should be designated as potentially complete historically (H, c). The current pathway would need to be evaluated per EPA's Revised Presentation Format comment #3.

## **COMMENT 136 - FREIGHTLINER TMP**

### **EPA 01/15/08 Comments:**

Groundwater: Change NAPL to Y? [currently Y]

Stormwater/Wastewater: Change pathway to b [currently c]

### **LWG Discussion:**

Groundwater: The 2005 Site Summary section 10.2.2 indicates NAPL was historically present (during excavation of former UST area).

Stormwater/Wastewater: The January 2008 JSCS Milestone report (Table 1) notes that

stormwater is "ongoing...waiting on SCE to be completed to determine pathway." The 2005 Site Summary states that DEQ noted "that catch basin sediment sampling, additional BMPs and/or analyses of stormwater samples for an expanded list of analytes may be required to complete stormwater evaluation." Based on the results of recent stormwater system sampling, the site is a likely source of contaminants (Results of Pre-Cleanout and Post-Cleanout Stormwater and Storm Line Cleanout Solids Sampling and Analyses, Truck Manufacturing Plant (TMP), Freightliner LLC. MFA, May 7, 2007).

**LWG Recommendations:**

Groundwater: Leave NAPL designation as 'Y'.

Stormwater/Wastewater: Change pathway to 'b'.

**Joint EPA and DEQ Response:**

Groundwater: EPA and DEQ do not agree with the LWG recommendation. The NAPL designation should remain Y?.

Stormwater/Wastewater: EPA and DEQ agree with the LWG recommendation (Note table is inconsistent as it shows "c"). Additionally, COIs should be 3, 6, and 7.

**COMMENT 137 - FREIGHTLINER TMP2 (PARTS PLANT)**

**EPA 01/15/08 Comments:**

Groundwater: Change pathway designation to Y? [currently Y(H)].

Stormwater/Wastewater: Change pathway to b [currently c]

**LWG Discussion:**

Groundwater: The 2005 Site Summary indicates that NAPL was discovered near the former USTs and hasn't been seen since that time (section 10.2.2).

Stormwater/Wastewater: The January 2008 JSCS Milestone report (Table 1) notes that stormwater is "ongoing...waiting on SCE to be completed." The Site Summary, section 10.3.7, indicates stormwater discharges to OF M3 (which includes other sites). There have been exceedences of permit benchmark values since 1994, and BMPs were put in place in 1995. No data reported since then in Site Summary.

**LWG Recommendations:**

Groundwater: Leave NAPL designation as 'Y(H)'.



Stormwater/Wastewater: Based on the results of stormwater system sampling, the site is a likely source of contaminants (Results of Pre-Cleanout and Post-Cleanout Stormwater and Storm Line Cleanout Solids Sampling and Analyses, Truck Manufacturing II (TMP II), Freightliner LLC, 5400 North Basin Avenue, Portland, Oregon. MFA, October 11, 2007). Therefore, the entry should be 'b' H, C.

**Joint EPA and DEQ Response:**

Groundwater: EPA and DEQ do not agree with the LWG recommendation and maintain EPA's original comment.

Stormwater/Wastewater: EPA and DEQ agree with the LWG recommendation.

**COMMENT 138 - FRONT AVENUE LP PROPERTIES (CMI NW, HAMPTON, LONESTAR NW/GLACIER NW, TUBE FORGING)**

**EPA 01/15/08 Comments:**

Stormwater/Wastewater: Change pathway to b [currently c]

Riverbank: Change pathway to a [currently c]

**LWG Discussion:**

Stormwater/Wastewater: The January 2008 JSCS Milestone report (Table 1) notes that stormwater is "ongoing...waiting on SCE to be completed." The 2007 Site Summary update indicates the site served by 3 private outfalls and OF19. At two outfalls there was a historical exceedance of zinc and oil & grease. DEQ indicates the stormwater pathway "may be complete"

Riverbank Erosion: The January 2008 JSCS Milestone report (Table 1) notes that riverbank erosion is "ongoing...waiting on SCE to be completed." The 2005 Site Summary, section 1.2, indicates that "Riverbank erosion is expected to be limited due to armoring of the bank by slag from the former Oregon Steel Mill. However, the slag itself may serve as a source of metals contamination to the river sediment." There has been no riverbank data.

**LWG Recommendations:**

Stormwater/Wastewater: Change pathway to 'b' due to historical release.

Overwater: Although there were no EPA recommendations to change this pathway, it has been modified to H\*, indicating that the facility had a historic overwater pathway, and there are current overwater operations, but there are no current overwater impacts.

Riverbank Erosion: Leave pathway as 'c' due to incomplete SCE.

**Joint EPA and DEQ Response:**

Stormwater/Wastewater: EPA and DEQ agree with the LWG recommendation.

Overwater: EPA and DEQ do not agree with the H\* designation (see Revised Presentation Format comment #3) and acknowledge that the pathway was likely complete historically (H, c). The current pathway would need to be evaluated per EPA's Revised Presentation Format comment #3.

Riverbank Erosion: EPA and DEQ do not agree with the LWG recommendation. The presence of OSM slag material at the Front Avenue site indicates that the riverbank erosion pathway should be designated as 'b'.

**COMMENT 139 - GASCO (NW NATURAL, KOPPERS, PACIFIC NORTHERN OIL)****EPA 01/15/08 Comments:**

Groundwater: COI list change to 1,2,3,4,7,10 [currently 1,3,7,10] and change pathway determination to a [currently b]

Stormwater/Wastewater: COI list change to 1,2,3,4,7,10 [currently 1,3,7,10]

Overland: COI list change to 1,2,3,4,7,10 [currently blank] and change pathway determination to a [currently d] and H,C? [currently blank]

Riverbank: COI list change to 1,2,3,4,7 [currently 1,3,7]

**LWG Discussion:**

Groundwater: The January 2008 JSCS Milestone report (Table 1) notes that the groundwater "pathway is complete." The Site Summary does not list SVOCs or TPH as groundwater COIs. Site Summary indicates that plume characterization is incomplete. The list of groundwater analytes provided in Section 10.2.4 of the 2007 Site Summary is consistent with the EPA recommendation (TPH and SVOCs).

Stormwater/Wastewater: JSCS notes that the stormwater "pathway is complete" and SCE is ongoing. The list of surface water analytes provided in Section 10.3.1 of the 2007 Site Summary is consistent with the EPA recommendation (TPH and SVOCs).

Overland: JSCS notes that overland transport is "NA". The Site Summary states "There is no or minimal potential for direct overland transport of chemicals in site soils to the river" (Section 1.1). Riverbank: JSCS notes that riverbank erosion "pathway is complete". The list of riverbank soil analytes provided in Section 10.1.2 of the 2007 Site Summary is consistent with the EPA recommendation (TPH and SVOCs).

**LWG Recommendations:**

Groundwater: If recent investigations confirm a known pathway, the EPA recommendation should be accepted. The COIs should be added. Note that VOC detections are limited to BTEX and SVOC detections are limited to carbazole, dibenzofuran, 2,4-dimethylphenol, 1- and 2-methylnaphthalene, 2- and 4-methylphenol, and phenol.

Stormwater/Wastewater: The COIs should be added. Note that VOC detections are limited to BTEX and SVOC detections are limited to carbazole, dibenzofuran, 2,4-dimethylphenol, 1- and 2-methylnaphthalene, 2- and 4-methylphenol, and phenol.

Overland: Both the JSCS determination and the Site Summary are addressing current conditions. The LWG table is also trying to assess historic conditions if there is information to support it. We recommend the EPA COI list be added and the pathway be determined as "a" H (historical complete pathway) based on the historical operations of the site. Note that VOC detections are limited to BTEX and SVOC detections are limited to carbazole, dibenzofuran, 2,4-dimethylphenol, 1- and 2-methylnaphthalene, 2- and 4-methylphenol, and phenol.

Riverbank: The COIs should be added. Note that VOC COIs are limited to BTEX and SVOC COIs are limited to carbazole,

**Joint EPA and DEQ Response:**

EPA and DEQ have not reviewed the site data sufficiently to comment on the proposed COI footnotes. It is further unclear why the LWG chose to propose qualify the VOC and SVOC detections for this site and not other sites.

Groundwater: EPA and DEQ maintain the original comment.

Overland: EPA and DEQ do not believe that overland transport of contaminants is limited to historical operations. Historical releases may present current transport of contaminants and thus the rationale for the C?. However, based upon EPA's revised presentation format, EPA and DEQ recommend that this pathway be designated as H "a" and C "c".

**COMMENT 141 - GOLDENDALE ALUMINUM****EPA 01/15/08 Comments:**

Groundwater: Change pathway designation to d [currently c] and N [currently H]

Stormwater/Wastewater: COI list change to 11 [currently 3,4,7]. Change pathway designation to d [currently c] and N [currently H]

**LWG Discussion:**

Groundwater: The January 2008 JSCS Milestone report (Table 1) notes that groundwater is "insignificant pathway, no actions recommended." The 2007 Site Summary update indicates that a No Further Action (NFA) determination was issued by DEQ on May 25, 2004 for overland transport, groundwater and stormwater.

Stormwater/Wastewater: The JSCS (Table 1) notes that stormwater is "insignificant pathway, no actions recommended." The 2007 Site Summary update indicates that a No Further Action (NFA) determination was issued by DEQ on May 25, 2004 for overland transport, groundwater and stormwater.

**LWG Recommendations:**

Groundwater: Update pathway to 'd' and delete C and COIs (Historic, Current and COIs do not apply to 'd').

Stormwater/Wastewater: Update pathway to 'd', and delete C and COIs.

**Joint EPA and DEQ Response:**

Groundwater: EPA and DEQ agree with the LWG recommendation.

Stormwater/Wastewater: EPA and DEQ agree with the LWG recommendation.

**COMMENT 142 - GOULD ELECTRONICS/NL INDUSTRIES****EPA 01/15/08 Comments:**

Groundwater: COI list change to 11 [currently 1,5,7,9,10]. Change pathway designation to d [currently c] and N [currently H?,C]

**LWG Discussion**

Groundwater: The January 2008 JSCS Milestone report (Table 1) notes that the SCE for the groundwater pathway is "completed" and an "insignificant pathway, no actions recommended." The 2005 Site Summary (section 1.3) notes that there were groundwater contaminants present historically and indicates that EPA issued a no-action ROD for groundwater at the site."

**LWG Recommendations:**

Groundwater: Do not make EPA recommended changes as historically there were contaminant plumes present.

**Joint EPA and DEQ Response:**

Groundwater: EPA and DEQ believe that this pathway should be depicted as 11 H “d”. The groundwater plumes did not reach the river, so the contaminant migration pathway is not complete. The source has been controlled, so there is no potential future source.

**COMMENT 143 – GUNDERSON****EPA 01/15/08 Comments:**

Groundwater: COI list change to 1,3,4,7 [currently 1,3,4,6,7]

Stormwater/Wastewater: Change pathway to a [currently c]

Riverbank: Change pathway to b [currently a]

**LWG Discussion:**

Groundwater: The current Table 5.1-2 COI entry is based on the Site Summary (2007, Section 10.2.1) identifying PCBs detected in water from Seep WR149.

Stormwater/Wastewater: The January 2008 JSCS Milestone report (Table 1) indicates stormwater pathways are complete for Areas 2 and 3 and “waiting on SCE to be completed” for Area 1. Site summary (2005) indicates stormwater should not be considered significant source of COPCs to the River.

Riverbank: JSCS indicates riverbank pathways are complete for Areas 2 and 3 and “waiting on SCE to be completed” for Area 1”. The Site summary (2005) states the following “River bank erosion may be considered a potential contaminant migration pathway to the river due to potential impacts to the stability of the material along the riverbank in Area 3. An Upland Source Evaluation is currently being conducted to evaluate the river bank for erodible soil conditions”. Table 1 of the Site summary indicates potential pathways in the former access gully and marine barge launchways and a question on pathway in paint and blast area.

**LWG Recommendations:**

Groundwater: PCBs were detected in an unfiltered water sample collected on June 21, 1999 as part of the initial characterization conducted on the water seeping from the river bank. PCBs were not detected in the split sample that was collected at the same time but was filtered through a 0.45-micron filter prior to analyses for PCBs. Since PCBs were not detected in the filtered sample that indicates that the PCBs were associated with the entrained fine soil particles and not in the water. PCBs have not been detected in all (four) subsequent water samples collected from the same discharge point (WR-149). PCBs have been deleted as a COI for groundwater.

Stormwater/Wastewater: Stormwater pathway evaluation is ongoing; pathway should remain as c. Do not split the site.

Overwater: Although there were no EPA recommendations to change this pathway, it has been modified to H\*, indicating that the facility had a historic overwater pathway, and there are current overwater operations, but there are no current overwater impacts.

Riverbank: Accept EPA's decision and change the pathway to "b" and do not split the site.

**Joint EPA and DEQ Response:**

Groundwater: EPA and DEQ agree with the LWG recommendation.

Stormwater/Wastewater: EPA and DEQ do not agree with the LWG recommendation and maintain EPA's original comment.

Overwater: EPA and DEQ do not agree with the H\* designation (see Revised Presentation Format comment #3) and acknowledge that the pathway was likely complete historically (H, b). The current pathway would need to be evaluated per EPA's Revised Presentation Format comment #3.

Riverbank: EPA and DEQ agree with the LWG recommendation.

**COMMENT 144 - JEFFERSON SMURFIT**

**EPA 01/15/08 Comments:**

Groundwater: COI list change to 11 [currently 3,4]. Change pathway designation to d [currently c] and N [currently H]

Stormwater/Wastewater: COI list change to 11 [currently 4,7]. Change pathway designation to d [currently c] and N [currently H,C]

Riverbank: Change pathway designation to d [currently c] and N [currently ?]

**LWG Discussion:**

Groundwater: The January 2008 JSCS Milestone report (Table 1) notes that groundwater is "insignificant pathway, no actions recommended" The 2005 Site Summary (section 1.3) indicates that "no groundwater investigations have occurred at the site and no preferential groundwater transport pathway were identified in the documents reviewed"

Stormwater/Wastewater: The January 2008 JSCS Milestone report (Table 1) notes that stormwater is "insignificant pathway, no actions recommended." The 2005 Site Summary indicates that "stormwater runoff from paved areas onsite could contain trace quantities of petroleum and oil and grease. Prior to 1969, wastewater discharged directly to the slip and could have contributed contaminants to in-water media. The City of Portland BES has recorded

exceedances for copper and pH in Jefferson Smurfit's wastewater." Table 1 of the Site Summary identifies metals and TPH as COIs.

Riverbank Erosion: The January 2008 JSCS Milestone report (Table 1) describes as "N/A". The Site Summary section 1.2 indicates the bank is described as "natural" and "evidence of bank erosion is unknown."

**LWG Recommendations:**

Groundwater: Update pathway to 'd' and deleted "H" and COIs.

Stormwater/Wastewater: Leave as is, as determined from Site Summary information.

Riverbank Erosion: Because there appears to have been no investigation the pathway should be identified as 'c' and '?'.

**Joint EPA and DEQ Response:**

Groundwater: EPA and DEQ agree with the LWG recommendation. See general comment 7.

Stormwater/Wastewater: EPA and DEQ agree with the LWG recommendation.

Riverbank Erosion: EPA and DEQ agree with the LWG recommendation

**COMMENT 145 – KINDER MORGAN LINNTON TERMINAL (GATX)**

**EPA 01/15/08 Comments:**

Stormwater/Wastewater: COI list change to 1,3,4,7 [currently 7] and pathway designation change to H,C [currently H?,C]

**LWG Discussion:**

Stormwater/Wastewater: The January 2008 JSCS Milestone Report (Table 1) indicates that the Stormwater SCE is ongoing and pathway priority is "to be determined" The Site Summary (2004) does not list COIs for stormwater. The current table entry (7-metals) is based on sampling conducted in 2002 (Section 10.3.3).

**LWG Recommendations:**

Stormwater/Wastewater: COIs for stormwater have been changed to VOCs (1), TPH (4), and metals (7). The EPA recommendation is not accepted, and the pathway remains as "H?, C".

Overwater: Although there were no EPA recommendations to change this pathway, it has been modified to H\*, indicating that the facility had a historic overwater pathway, and there are current overwater operations, but there are no current overwater impacts.

**Joint EPA and DEQ Response:**

Stormwater/Wastewater: EPA and DEQ maintain EPA's original comments.

Overwater: EPA and DEQ do not agree with the H\* designation (see Revised Presentation Format comment #3) and acknowledge that the pathway was likely complete historically (H, b). The current pathway would need to be evaluated per EPA's Revised Presentation Format comment #3.

**COMMENT 146 LINNTON OIL FIRE TRAINING GROUNDS****EPA 01/15/08 Comments:**

Groundwater Potentially Complete Pathway should be "c" [currently "d"];

Stormwater Historic/Current should be "H, C?" [currently H];

Riverbank Erosion Potentially Complete Pathway should be "c" [currently "d"].

**LWG Discussion:**

The January 2008 JSCS Milestone report (Table 1) notes that upland source control is completed for the site (grey shading).

Groundwater: JSCS notes groundwater as "currently no complete pathway, groundwater monitoring to confirm plume stability". The Site Summary (2005, Section 1.3) says that the leading edge of onsite groundwater are located at least 600 ft from the river and that groundwater impacts are unlikely to be a current or ongoing source to the river. There is no discussion of historical groundwater.

Stormwater/Wastewater: The January 2008 JSCS Milestone report (Table 1) notes that stormwater is "insignificant pathway, no actions recommended". The Site Summary notes that DEQ determined that source controls were not necessary.

Riverbank Erosion: The January 2008 JSCS Milestone report (Table 1) notes that riverbank is "insignificant pathway, no actions recommended". The Site Summary does not present the data or the conclusions for the data for soil samples collected near river (shown on supplemental figure).

**LWG Recommendations:**

Groundwater: The historical groundwater conditions at the site were evaluated and presented in the RI report and DEQ concurred with these conclusions in the Record of Decision (ROD). The RI (and DEQ's ROD) concluded that the nature and extent of the groundwater plume at the site was "well defined" and that the low conductivity of the subsurface material had limited the



lateral extent of the plume to the area within the limits of the monitoring well network. With this confidence in the limited groundwater impacts at the site, the ROD focused on removing the source material followed by a groundwater monitoring component to ensure that the residual plume continued to attenuate. As directed in the ROD, the City conducted five years of groundwater monitoring and found that the groundwater concentrations at the site have continually declined since remedial excavation activities and that the plume is stable to shrinking (as described in the LOFTG Site Summary). As noted in the Site Summary Section 10.2.3, Plume Extent, the leading edge of the TPH plume is 600 feet from the river, with concentrations decreasing within the plume boundaries. Therefore, EPA changes are not recommended, and no changes should be made to this pathway.

**Stormwater/Wastewater:** The site data indicates that the stormwater pathway is not currently a complete pathway and DEQ has concurred with this conclusion in the form of an NFA. The lines of evidence that support this conclusion include: 1) no stormwater is leaving the site; the historic pathway has been eliminated (the culvert collapsed and filled in), 2) there are no defined channels for stormwater from the site to travel towards a topographic low swale to the north that discharges to the river, 3) analytical soil data, collected offsite in a depression in the stormwater swale just prior to the culvert (LOFTG14 – last Figure in Site Summary) that historically conveyed stormwater to the river, showed that COCs were not present; 4) and follow-up beach samples also did not detect site contaminants. Therefore, the weight of evidence supports the conclusion that the stormwater pathway is not currently a complete pathway. EPA changes are not recommended, and no changes should be made to this pathway.

**Overland Transport:** Although no comments were provided by EPA, the City requests this pathway information be changed. The potential transport of contaminants from the site toward the river has been described and addressed under the Stormwater Pathway evaluation. The presentation of information associated with Overland Transport is simply double counting the same contaminants describe under another pathway. Therefore, the City requests that all the current values under Overland Pathway be removed and a “d” be inserted in the Potentially Complete Pathway column.

**Riverbank Erosion:** The site limits/property is not located adjacent to the river and consistent with the Site Summary guidance, this should be not applicable. Again, any offsite migration has been addressed under the Stormwater pathway and including it here is double counting pathways. Additionally, confirmatory riverbank sampling along the riverbank along the stormwater pathway did not detect PCPs, as described in the Site Summary. Therefore, EPA changes are not recommended.

#### **Joint EPA and DEQ Response:**

**Groundwater:** EPA and DEQ agree with the LWG recommendation.

**Stormwater/Wastewater:** EPA and DEQ agree with the LWG recommendation.

**Overland:** EPA and DEQ agree with the LWG recommendation.

Riverbank Erosion: EPA and DEQ agree that Linnton Oil Fire Training Grounds operations did not extend to the riverfront. As a result, this pathway should be designated as "N/A." However, low levels of COIs have been detected in riverbank soils on the adjoining BPA property, which is adjacent to the river. Consequently, the riverbank erosion pathway should be designated as "d" for the BPA property.

#### **COMMENT 147 - LINNTON PLYWOOD (COLUMBIA RIVER SAND AND GRAVEL)**

##### **EPA 01/15/08 Comments:**

Groundwater: COI list change to 11 [currently 4,7]. Change pathway designation to d [currently H,C].

##### **LWG Discussion:**

Groundwater: The January 2008 JSCS Milestone report (Table 1) notes that groundwater is "insignificant pathway, no actions recommended." The 2005 Site Summary (section 10.2.3) indicates "the site does not appear to be a current or ongoing source to groundwater. The DEQ recommends no further investigation of upland sources of contamination to the Willamette River." Groundwater sampling in 2002 detected metals, phthalates, and diesel.

##### **LWG Recommendations:**

Groundwater: Groundwater investigated historically, Change COIs to 4,7,9. Change pathway to 'c' H?.

##### **Joint EPA and DEQ Response:**

Groundwater: EPA and DEQ agree with the LWG recommendation.

#### **COMMENT 148 AND 149 – MARCOM (NORTH AND SOUTH PARCEL)**

Note: EPA has commented previously that the MarCom site should be divided into north and south parcels. The comments presented below are based on the separate evaluations of the North and South parcels.

##### **EPA 01/15/08 Comments:**

##### **MarCom -- North Parcel**

The groundwater, stormwater overwater and riverbank erosion pathways should be designated as incomplete [currently undetermined pathway for groundwater, river bank and overwater discharges and potentially complete for storm/wastewater].

The overland transport pathway should be designated as likely complete. COIs are TPH and metals. The pathway is historical. [these are the current designations for the combined site]

## **MarCom – South Parcel**

The overland transport pathway should be designated as current and historical

The riverbank erosion pathway should be designated as current and historical and likely complete (b).

### **LWG Recommendations:**

NP Groundwater: The January 2008 JSCS Milestone report (Table 1) notes “insignificant pathway” with a “low” pathway priority. Site Summary (Section 10.2.2, October 2006) says DEQ SCD concluded that groundwater does not pose unacceptable risk. The NP designation should be (d).

NP Stormwater: JSCS indicates that stormwater SCE is complete, is an insignificant pathway, and low priority. The JSCS table supports a (d) pathway designation. Note that the R2R (b) H, C? pathway designation is based on COPCs detected in ditch sediments below the OF52A outfall.

NP Overwater: JSCS indicates “N/A” with a “none” pathway priority. There are/have been no overwater operations associated with the North Parcel and the NP designation should be (d).

NP Riverbank: JSCS indicates SCE not started, “Deferred investigation of beach to Mar Com South Parcel”. The Site Summary notes PAHs>SLVs in riverbank soils in 2004. There has been no sampling of riverbank soil. The soil samples containing PAHs above sediment SLVs were collected from borings completed inland from the top of bank. The investigation of the beach is part of the SP because only the SP had historical shipyard activities. The river bank pathway designation should be left as undetermined (c), H, C until investigation is complete.

NP Overland: JSCS indicates SCE completed, “suspected migration pathway”, low priority, DEQ issued SCD in 2004, SCM completed in 2007. This pathway should be changed to (c) H for the NP ((c) because it is not confirmed that river bank soils impacted in-water media).

SP Overland: JSCS indicates SCE has not been completed, p High priority. The designation should be (c) H, C.

SP Riverbank: JSCS indicates SCE has not been completed, priority to be determined. The designation should be (c) H, C.

### **Joint EPA and DEQ Response:**

NP Groundwater: EPA and DEQ agree with the LWG recommendation. See general comment 7.

NP Stormwater: EPA and DEQ agree with the LWG recommendation.

NP Overwater: EPA and DEQ believe that this pathway should be designated N/A.

NP Riverbank: EPA and DEQ agree with the LWG recommendation.

NP Overland: EPA and DEQ believe that this pathway should be H “b” and C “d” (once the Port of Portland paves the site) – impacts are not from riverbank soils, but from sheet flow runoff of stormwater. Additionally, PCBs, TPH and metals are COIs.

SP Overland: EPA and DEQ disagree with the LWG recommendation and believe the designation should be (b) H,C. Sufficient information exists to designate this pathway as potentially complete.

SP Riverbank: EPA and DEQ disagree with the LWG recommendation and believe the designation should be (b) H,C. Sufficient information exists to designate this pathway as potentially complete.

#### **COMMENT 150 - MARINE FINANCE (HENDREN TOW BOATS)**

##### **EPA 01/15/08 Comments:**

Groundwater: COI list change to blank [currently 1,3,4,7,8]. Pathway designation remains d, but historic/current should be blank [currently H?,C]

Stormwater/Wastewater: COI list change to 1,3,4,7,8 [currently NS]. Change pathway to b [currently c]

Overland: Change pathway designation to b [currently c] and H?,C? [currently H?]

Riverbank: Change pathway designation to H,C [currently H]

##### **LWG Discussion:**

Groundwater: The January 2008 JSCS Milestone report (Table 1) notes that groundwater is “insignificant pathway, no actions recommended” and that the SCE and an SCM is not needed. The 2005 Site Summary section 1.3 states that “VOCs, PAHs, and dissolved metals have been detected in the shallow groundwater at the site during site investigations. However, groundwater does not appear to be a pathway of concern to the Willamette River, based on groundwater contaminant concentrations present in the upland portion of the site and groundwater conditions.”

Stormwater/Wastewater: JSCS notes that stormwater is “insignificant pathway, no actions recommended”, that the SCE is complete, and that stormwater sampling is underway. The 2005 Site Summary notes that “there are no stormwater systems associated with the site”, but the JSCS indicates that a system was installed in 2006.

Overland Transport: JSCS notes that “contaminated over screening criteria in soil potentially susceptible to runoff” and that a report is pending on soil removal action. The 2005 Site Summary Section 1.1 indicates “sheet stormwater runoff is a potential transport mechanism, both historically and currently, for contaminants in uplands surface soils to reach the Willamette River.”

Riverbank Erosion: The January 2008 JSCS Milestone report (Table 1) notes that riverbank erosion is “insignificant pathway, no actions recommended.”

#### **LWG Recommendations:**

Groundwater: Retain “d” pathway assignment; leave COIs and Historic/Current columns blank.

Stormwater/Wastewater: Assuming that recent stormwater sampling supports EPA recommendation, the recommendation should be accepted.

Overwater Discharges: Pathway has been modified to H\*, indicating that the facility had a historic overwater pathway, and there are current overwater operations, but there are no current overwater impacts.

Overland Transport: Accept EPA recommendation pending report.

Riverbank: No additional work is pending, the entry should not be modified.

#### **Joint EPA and DEQ Response:**

Groundwater: EPA and DEQ agree with the LWG recommendation.

Stormwater/Wastewater: EPA and DEQ believe that this pathway should be depicted as H “c” C “d”.

Overwater: EPA and DEQ do not agree with the H\* designation (see Revised Presentation Format comment #3) and believe that the historic pathway be depicted as H “c”. The current pathway would need to be evaluated per EPA’s Revised Presentation Format comment #3.

Overland Transport: EPA and DEQ believe that this pathway should be designated as H “b” and C “d”.

Riverbank: EPA and DEQ believe that this pathway should be designated as H “b” and C “d”.

#### **COMMENT 151 - MCCALL OIL**

##### **EPA 01/15/08 Comments:**

Stormwater/Wastewater: Change pathway to b [currently c] and H,C? [currently ?]

**LWG Discussion:**

Stormwater/Wastewater: The January 2008 JSCS Milestone report (Table 1) notes that stormwater is "ongoing...waiting on SCE completion" and stormwater sampling is currently being conducted. The 2005 Site Summary (Section 10.3) indicates there are two permitted outfalls and discharge from one and catch basins contained TPH, PAHs, and metals. The Site Summary indicates a "high potential of occurrence" of containment transport to Willamette River.

**LWG Recommendations:**

Stormwater/Wastewater: Update pathway to 'b' and '?' to 'H,C?' because the effectiveness of BMPs have not been evaluated.

Overwater: Although there were no EPA recommendations to change this pathway, it has been modified to H\*, indicating that the facility had a historic overwater pathway, and there are current overwater operations, but there are no current overwater impacts.

**Joint EPA and DEQ Response:**

Stormwater/Wastewater: EPA and DEQ agree with the LWG recommendation.

Overwater: EPA and DEQ do not agree with the H\* designation (see Revised Presentation Format comment #3) and acknowledge that the pathway was likely complete historically (H, c). The current pathway would need to be evaluated per EPA's Revised Presentation Format comment #3.

**COMMENT 153 - OREGON STEEL MILLS****EPA 01/15/08 Comments:**

Groundwater: COI list change to 4,7 [currently blank]. Change pathway designation to b [currently d] and H,C [currently blank]

Stormwater/Wastewater: Change pathway designation to a [currently c] and H,C [currently H]

**LWG Discussion:**

Groundwater: The January 2008 JSCS Milestone report (Table 1) notes that the groundwater SCE is complete, that UST & AST AOCs groundwater is an "insignificant pathway, no actions recommended", and that groundwater from other AOCs is a complete pathway. The 2007 Site Summary update section 10.2.4 indicates "RI and Source Control Evaluations have assessed groundwater conditions with respect to metals and petroleum hydrocarbons in groundwater demonstrated that upland groundwater is not adversely impacting the Willamette River."

Stormwater/Wastewater: JSCS notes that the stormwater “pathway is complete.” The Site Summary section 10.3.7 indicates COPCs were detected in stormwater catch basin solids and that there is a potential for discharge from the outfalls.”

**LWG Recommendations:**

Groundwater: Leave pathway designation as d.

Stormwater/Wastewater: Pathway has been changed to ‘a’ and a H has been added and applies to stormwater. EOSM’s permitted discharge from their wastewater plant was not a complete pathway.

**Joint EPA and DEQ Response:**

Groundwater: EPA and DEQ recommend that this pathway be changed to “c”.

Stormwater/Wastewater: EPA and DEQ disagree with the LWG recommendation; both stormwater and wastewater are H and C. The LWG needs to separate stormwater and wastewater to accurately depict the COIs in each and the appropriate designators.

**COMMENT 154 - OWENS CORNING – LINNTON**

**EPA 01/15/08 Comments:**

Groundwater: Change pathway designation to c [currently d]

Stormwater/Wastewater: Change pathway designation to H,C [currently H]

**LWG Discussion:**

Groundwater: The January 2008 JSCS Milestone report (Table 1) notes that the groundwater is an “insignificant pathway, no actions recommended.” The 2005 Site Summary (section 10.2.4) states that impacted groundwater at the site is “not significant and does not appear to be a current or ongoing source of Willamette River water or sediment contamination.”

Stormwater/Wastewater: The JSCS notes that the stormwater is “waiting on SCE completion.” The Site Summary section 10.3.3 indicates there were periods of minor non-compliance with discharge standards that have not likely adversely affected sediment quality in the river. The Site Summary also indicates that stormwater from the undeveloped portion of the site is uncontrolled but the area is vegetated and it is likely that stormwater infiltrates into the soil. There is no information on historic discharges from the site.

**LWG Recommendations:**

Groundwater: Leave pathway as ‘d’ as it was concluded that groundwater is not considered a current source and the EPA recommendation does not provide COIs or historic/current context.

Stormwater: Update pathway designation to H? as there is no information on historic discharges and current sources are unlikely.

**Joint EPA and DEQ Response:**

Groundwater: EPA and DEQ agree with the LWG recommendation. See general comment 7.

Stormwater: DEQ and EPA recommend that the stormwater pathway designation be changed to H "c" and C "c" as the source control evaluation is ongoing.

**COMMENT 155 - POP TERMINAL 1, SOUTH**

**EPA 01/15/08 Comments:**

Groundwater Potentially Complete Pathway should be "c" [currently "d"];

Stormwater Historic/Current should be "H, C?" [currently H].

**LWG Discussion:**

Groundwater: JSCS shows that source control work at the Terminal 1 South (Riverscape) site is complete (grey shading). The groundwater pathway determination is "Insignificant pathway; no actions recommended" and the priority level is "low". As noted in the Site Summary (2007) DEQ issued a NFA in 2002 and concentrations of COPCs were below DEQ SLVs. No NAPL or contaminated groundwater discharges have been observed at the site.

Stormwater: Stormwater has the same JSCS designations as groundwater. Table 5.1-2 has a "c" H designation because no characterization had been performed on the former stormwater system when it drained the former industrial site with surface soil contamination. The Site Summary states "there are no current direct stormwater discharges from the Riverscape Facility". The facility has been redeveloped as high density residential, which does not require stormwater permitting.

**LWG Recommendations:**

Groundwater: The "d" designation should not be changed. With the DEQ pathway designation, no additional work is planned for the site. An H and/or C designation needs to accompany a "c" pathway determination in the table and EPA did not provide either.

Stormwater: Given that the facility is currently in residential use with no stormwater permitting requirements, and all site investigation/SCE/SCMs are complete, the Table 5.1-2 entries should not be changed.



**Joint EPA and DEQ Response:**

Groundwater: EPA notes that lead and PAHs were both detected in groundwater above SLVs; therefore, EPA and DEQ recommend that this pathway be designated as H “c” and C “d”, unless the LWG can present information to show that the elevated groundwater levels did not reach the river historically.

Stormwater: EPA and DEQ recommend that this pathway be designated as H “c” and C? “c” because this stormwater line is uncharacterized. EPA notes that just because a site is residential does not mean that it is not a source that may need to be controlled, especially since the historical activity was industrial. However, given the relatively low initial contaminant soil concentrations, relatively limited footprint of the contamination, the current in-place source control measures and the lack of elevated sediment levels immediately adjacent to the Terminal 1 South property, stormwater does not appear to be a likely current contaminant migration pathway. If new stormwater lines were installed due to the redevelopment of the site and there are not potential historical sediments in the stormwater lines, then EPA and DEQ would be amenable to a designation of H “c” and C “d”.

**COMMENT 156 - POP TERMINAL 2****EPA 01/15/08 Comments:**

Stormwater/Wastewater Pathway: This pathway should be designated as current [currently H]; the current designation should be qualified with a question mark.

**LWG Discussion:**

Stormwater: JSCS indicates that stormwater work is ongoing and the pathway priority is to be determined. Current activities at the site consist of break-bulk lumber, plywood, pulp and products on vessels, railcars, and trucks (Site Summary 2007).

**LWG Recommendations:**

Stormwater: Unless ongoing SCE work shows otherwise, the entry should not be changed.

**Joint EPA and DEQ Response:**

Stormwater: EPA and DEQ disagree with the LWG recommendation. Since there is ongoing SCE, the pathway should be indicated as H,C?.

**COMMENT 157 - POP TERMINAL 4, AUTO STORAGE****EPA 01/15/08 Comments:**

Overwater Discharges Potentially Complete Pathway should be “c” [currently “d”];

Riverbank Erosion Potentially Complete Pathway should be "c"; Riverbank Erosion Historic/Current should be "H" [currently "d"].

**LWG Discussion:**

Overwater: JSCS has determined that source control work has been completed for the site (grey shading). JSCS SCE activities for Overwater Activities are noted as "N/A" with "no known current sources (spills reported to OERS). Current activities are limited to unloading automobiles and in the past also included steel (Site Summary 2007).

Riverbank: JSCS SCE activities for riverbank soils is noted as completed and the pathway is determined "insignificant" with a low priority level. The Site Summary (2007) states that river bank samples have been collected with no detections above SLVs.

**LWG Recommendations:**

Overwater: In general, LWG is recommending that sites with current overwater facilities get an H\* designation, indicating that the facility had a historic overwater pathway, and there are current overwater operations, but there are no current overwater impacts. However, an exception should be made here (leave it as a "d") due to the very limited nature of the facility, as detailed in the Site Summary (2006).

Riverbank: There are no plans for further investigation and no change should be made.

**Joint EPA and DEQ Response:**

Overwater: EPA and DEQ do not agree with the H\* designation (see Revised Presentation Format comment #3) and acknowledge that the pathway was likely complete historically (H, c). The current pathway would need to be evaluated per EPA's Revised Presentation Format comment #3.

Riverbank: EPA and DEQ agree with the LWG recommendation.

**COMMENT 158 - POP TERMINAL 4, SLIP 1**

**EPA 01/15/08 Comments:**

Groundwater Pathway: This pathway should be designated as incomplete (d) [currently (b) H].

Stormwater/Wastewater: The COI list should be expanded to include VOCs, TPH and phthalates; the pathway should be designated as likely complete (b); the current designation should be qualified with a question mark [currently "c" H, C].

Overwater Discharges: This pathway should be designated as likely complete (b); historic and current [currently "c" H].

**LWG Discussion:**

Groundwater Pathway: Agreed.

Stormwater/Wastewater: JSCS indicates that stormwater sampling is ongoing. Preliminary results indicate the presence of TPH and phthalates and these should be added to the list of COI. VOCs were not identified as a COI in the stormwater study and should not be included.

Overwater Discharges: JSCS designates this pathway as "N/A" with "No known current sources (spills reported to OERS)". It appears that no additional work is to be completed.

**LWG Recommendations:**

Groundwater: Site investigation results do not indicate the presence of a current or likely historical sources of COI in groundwater; therefore we agree with the EPA recommendation.

Stormwater: Add TPH and Phthalates as COIs, but not VOCs. The pathway designation should not change until the stormwater characterization is complete.

Overwater: We recommend that the EPA recommendation be rejected. The current entry is based on the historical operations at the site dating back to before OERS records were kept.

**Joint EPA and DEQ Response:**

Stormwater: EPA and DEQ agree with the COI recommendation but disagree with the pathway designation; it should be 'b' H,C.

Overwater: EPA and DEQ do not agree with the LWG recommendation. This pathway should be classified as historical, "c." See general comment 3.

**COMMENT 159 - POP TERMINAL 4, SLIP 3****EPA 01/15/08 Comments:**

Stormwater/Wastewater and Overwater discharges: These pathways should be designated as complete (a) [currently (c)]. Overwater Discharges Historic/Current should be "H, C? [currently H]".

**LWG Discussion**

Stormwater/Wastewater: JSCS designates the SCE to be ongoing, the pathway is complete with BMPs in place and with a p Med priority. The "c" designation in the current Table 5.1-2 was based on statements in the Site Summary (2007) that work on this pathway was ongoing.

Overwater: JSCS indicates "N/A - Historic releases to be addressed by the in-water T4 Early Action". The Site Summary says that there are no current operations at the Slip 3 Uplands Facility (Section 1.4).

**LWG Recommendations:**

Stormwater: Do not make changes unless supported by recent work.

Overwater: Do not make changes. There are still no current overwater activities at the Slip 3 Upland Facility. As stated in the Site Summary, berths 410 and 411 located on the north side of the slip are currently used by Kinder Morgan and they are a part of and described in the Slip 1 Upland Facility Site Summary.

**Joint EPA and DEQ Response:**

Stormwater: EPA and DEQ maintain the original comment.

Overwater: EPA and DEQ believe that this pathway should be designated as H "a" and C "d".

**COMMENT 160 - PORTLAND GENERAL ELECTRIC - HARBORTON**

**EPA 01/15/08 Comments:**

Groundwater: Change pathway designation to d [currently c] and H,C [currently H]

Stormwater/Wastewater: Change pathway designation to d [currently c] and H,C [currently H]

**LWG Discussion:**

Groundwater: The January 2008 JSCS Milestone report (Table 1) notes that the groundwater SCE is "complete" and is an "insignificant pathway, no actions recommended." The 2005 Site Summary section 10.2.4 states that "EPA has concurred with DEQ that the site does not appear to be a current source of contamination to the river." There is indication that COIs were detected in the past but recent events have shown no detectable concentrations.

Stormwater/Wastewater: The JSCS notes that the stormwater SCE is "complete" and is an "insignificant pathway, no actions recommended." The Site Summary section 10.3.1 indicates that no stormwater investigations or permits are associated with the site. It does indicate that a perimeter dike prevents uncontrolled stormwater from reaching the river and stormwater in other areas drains to either a wetland or swale.

**LWG Recommendations:**

Groundwater: Do not change table because COIs were detected in the past.

Stormwater/Wastewater: Leave pathway as 'c' H since there have been no investigations of stormwater at the site.

**Joint EPA and DEQ Response:**

Groundwater: Due to the documented lack of groundwater contamination, EPA and DEQ agree with EPA's original comment to change the pathway designation to d. Regarding the H,C designation, EPA and DEQ recommend that H,C be left blank.

Stormwater/Wastewater: EPA and DEQ agree with EPA's original comment to change the pathway to d, but the H,C designation should be blank.

**COMMENT 161 - PREMIER EDIBLE OILS**

**EPA 01/15/08 Comments:**

Stormwater/Wastewater: Change pathway designation to H,C? [currently H]

**LWG Discussion**

Stormwater/Wastewater: The January 2008 JSCS Milestone report (Table 1) indicates the facility has been dismantled and outfalls removed. The 2005 Site Summary (Section 1.4) states that "historically, discharges through the stormwater system were direct pathways for contaminants to the river, but currently all operations have ceased and there are no active outfalls."

**LWG Recommendations:**

Stormwater/Wastewater: Leave as 'H' as Site Summary and JSCS indicate no active outfalls at the site.

**Joint EPA and DEQ Response:**

Stormwater/Wastewater: EPA and DEQ agree with the LWG recommendation. However, EPA does not have information to support outfalls have been removed/dismantled. Please provide this documentation to EPA and DEQ.

**Comment 162 - Rhone Poulenc**

**EPA 01/15/08 Comments:**

Stormwater/Wastewater: COI list change to 1,5,6,7,10 [currently 10]. Change pathway designation to a [currently c] and to C [currently H]

Overland: Change pathway designation to d [currently c]

## **LWG Discussion**

Stormwater/Wastewater: The January 2008 JSCS Milestone report (Table 1) notes that the stormwater "waiting on SCE to be completed." The 2007 Site Summary update section 9.3.7 states "there is no stormwater pathway for transport of constituents from the RP Property to the LWR." It also indicates that the quality and applicability of the data has not been evaluated by LWG (section 1.4).

Overland: The January 2008 JSCS Milestone report (Table 1) notes overland as "NA." The site is not located near the river.

## **LWG Recommendations:**

Stormwater/Wastewater: Leave pathway as 'c' unless recent work supports changes.

Overland: Update pathway to 'd' due to distance from the river.

## **Joint EPA and DEQ Response:**

Stormwater/Wastewater: EPA and DEQ disagree with the LWG recommendation and maintain EPA's original comments. Rhone Poulenc constituents continue to be detected in stormwater lines along Front Avenue.

## **COMMENT 163 - ROMAR TRANSPORTATION SYSTEM**

### **EPA 01/15/08 Comments:**

Groundwater: Change pathway designation to d [currently c]

Stormwater/Wastewater: Change pathway designation to H [currently H,C]

## **LWG Discussion:**

Groundwater: The January 2008 JSCS Milestone report (Table 1) notes that the groundwater SCE is "complete" and is an "insignificant pathway, no actions recommended." The 2005 Site Summary section 1.3 indicates that no groundwater investigations have been completed".

Stormwater/Wastewater: The JSCS notes that the stormwater SCE is "complete" and is an "insignificant pathway, no actions recommended." The 2005 Site Summary indicates that "surface drainage is unknown" and that a portion of runoff likely flows to the International Terminals slip" but there is no data.

## **LWG Recommendations:**

Groundwater: Since no groundwater investigations have been completed, no change should be made to the table.

Stormwater/Wastewater: With no data to evaluate the pathway, the table should be changed to H?C?

**Joint EPA and DEQ Response:**

Groundwater: EPA and DEQ do not agree with the LWG recommendation and maintain EPA's original comment.

Stormwater/Wastewater: EPA and DEQ agree with the LWG recommendation.

**COMMENT 164 - SCHNITZER INVESTMENT – DOANE LAKE (AIRE LIQUIDE)**

Not included in JSCS table. Discussion below based on Site Summary information.

**EPA 01/15/08 Comments:**

Groundwater: Change pathway designation to H? [currently H]

Stormwater/Wastewater: Change pathway designation to H,C? [currently H]

**LWG Discussion:**

Groundwater: The 2005 Site Summary section 1.3 states "Based on the limited groundwater data available for the Air Liquide site, the primary contaminants of concern in groundwater are lead, arsenic, and calcium hydroxide. No information was available indicating that preferential pathways have been assessed at the site."

Stormwater/Wastewater: The 2005 Site Summary indicates site has general permit to discharge industrial stormwater. It is noted that historically calcium hydroxide may have reached river, but no other mention of pathway. The site has occasional exceedances of permit benchmarks (D. Sanders, COP, pers. comm.).

**LWG Recommendations:**

Groundwater: Since no groundwater investigations have been completed, no change should be made to the table.

Stormwater/Wastewater: With no data to evaluate the pathway, the table should be changed to H?,C?

**Joint EPA and DEQ response:**

Groundwater: EPA and DEQ believe that this pathway designation should be H "c" and C "c".

Stormwater/Wastewater: EPA and DEQ recommend pathway as designation to H "a" and C "c".

Between 1949 and 1980, Air Liquide discharged lime wastewater from the acetylene plant operations to East Doane Lake, which discharged to the Willamette River via a storm sewer located beneath NW Front Avenue mainly during heavy rain events (November through April). A 1995 DEQ investigation and remediation of a spill of 200 gallons of compressor oil revealed a subsurface layer of soil contaminated with PCBs and chlorinated solvents. The investigation also revealed a soil layer containing a mixture of dark soil and asphalt shingle fragments. It is believed that fill material from a local roofing manufacturer was used to construct the building pad in 1949 or when the facility was expanded in 1957. In a 1997 subsurface analysis conducted to determine the extent of roofing material, the soil layer was described as artificial fill consisting of glass, wood, concrete, and roofing material (asphalt shingles) and solidified tar. River sediments collected offshore of City Outfall 22B have identified the presence of acetone, arsenic, carbon disulfide, chromium, lead, methyl ethyl ketone, and PCBs, which have also been found in facility soils and/or groundwater.

#### **COMMENT 165 - SCHNITZER INVESTMENT – KITTRIDGE**

##### **EPA 01/15/08 Comments:**

Groundwater: Change pathway designation to d [currently c]

Stormwater/Wastewater: Change pathway designation to H,C? [currently H]

##### **LWG Discussion:**

Groundwater: The January 2008 JSCS Milestone report (Table 1) notes that the groundwater SCE is “complete” and is an “insignificant pathway, no actions recommended” and that an SCM is not needed. The 2005 Site Summary indicates metals were detected historically in groundwater, but that “DEQ indicated that it is unlikely that [contaminated] groundwater is migrating from the site to the river, and additional investigation is not warranted.”

Stormwater/Wastewater: The JSCS notes that the stormwater SCE is “complete” and is an “insignificant pathway, possible historic source.” The 2005 Site Summary indicates that “currently stormwater either infiltrates into the ground or is collected in catch basins connected to the City outfall 19.” Historically there may have been a direct pathway to the river through a channel draining the cylinder test area.

##### **LWG Recommendations:**

Groundwater: Due to potential historical releases, the pathway should be changed to ‘c’ H.

Stormwater/Wastewater: Due to the potential for historic release, the pathway should be changed to ‘c’ H.



**Joint EPA and DEQ Response:**

Groundwater: EPA and DEQ disagree with the LWG recommendation and maintain EPA's original comment. See general comment 7 regarding the groundwater pathway.

Stormwater: EPA and DEQ disagree with the LWG recommendation and maintain EPA's original comment.

**COMMENT 166 - SHAVER TRANSPORTATION****EPA 01/15/08 Comments:**

Groundwater: Change pathway designation to d [currently c]

Stormwater/Wastewater: Change pathway designation to d [currently c]

Overwater: Change pathway designation to d [currently b]

Overland: Change pathway designation to d [currently c]

Riverbank: Change pathway designation to d [currently c]

**LWG Discussion:**

JSCS – Upland Source Control has been completed for this site.

Groundwater: The January 2008 JSCS Milestone report (Table 1) notes that the groundwater SCE is "complete" and is an "insignificant pathway, no actions recommended." The 2005 Site Summary Section 10.3 indicates that no groundwater investigations have been completed for the site.

Stormwater/Wastewater: The JSCS notes that the stormwater SCE is "complete" and is an "insignificant pathway, no actions recommended." The 2005 Site Summary indicates that stormwater/wastewater systems for the facility are unknown.

Overwater: The JSCS notes that the overwater discharge SCE is "complete" and is an "insignificant pathway, no actions recommended." The 2005 Site Summary indicates that there is a potential for overwater spills during the transfer or petroleum products, but none have been reported.

Overland: The JSCS notes that the overland transport SCE is "complete" and is an "insignificant pathway, no actions recommended." The 2005 Site Summary indicates the site is paved and therefore transport via soil erosion is unexpected and the remaining areas are vegetated which stabilizes the soils and reduces erosion of soil.

Riverbank Erosion: The JSCS notes that the riverbank erosion SCE is "complete" and is an "insignificant pathway, no actions recommended." The 2005 Site Summary notes that vegetated banks stabilize the soil and reduce erosion to the river.

#### **LWG Recommendations:**

Groundwater: Due to lack of groundwater investigations, the table should not be changed.

Stormwater/Wastewater: Unless it can be established that there is no stormwater system at the site, the entry should not be changed.

Overwater: change pathway to 'c' and historic/current to H\* since there is a potential for overwater spills at the operating facility.

Overland: Leave pathway as 'c' as there is limited information to determine pathway is not complete.

Riverbank: Leave pathway as 'c' as there is no bank sampling information.

#### **Joint EPA and DEQ Response:**

Groundwater: EPA and DEQ disagree with the LWG recommendation and maintain EPA's original comment. See general comment 7 regarding the groundwater pathway.

Stormwater/Wastewater: EPA and DEQ disagree with the LWG recommendation and maintain EPA's original comment.

Overwater: EPA and DEQ do not agree with the H\* designation (see Revised Presentation Format comment #3) and acknowledge that the pathway was likely complete historically (H, b). The current pathway would need to be evaluated per EPA's Revised Presentation Format comment #3.

Overland: EPA and DEQ disagree with the LWG recommendation and maintain EPA's original comment.

Riverbank: EPA and DEQ disagree with the LWG recommendation and maintain EPA's original comment.

#### **COMMENT 167 – SILTRONIC**

##### **EPA 01/15/08 Comments:**

Overland: Change pathway designation to H,C [currently H]

**LWG Discussion:**

Overland: The JSCS Table 1 indicates that overland transport is "NA, subsurface releases from UST system." The Site Summary section 1.1 states that substantial investigations indicate that "overland transport is not a significant pathway" but historically overland transport "may have been a complete pathway to the river."

**LWG Recommendations:**

Overland: Pathway designation remains unchanged.

**Joint EPA and DEQ Response:**

Overland: EPA and DEQ disagree with the LWG recommendation. Northwest Natural Gas Co. is to conduct an RI for this property that may reveal that this is a current pathway. Because of the pending investigation, this pathway should be designated as H "b" and C "c".

**COMMENT 168 - ST SERVICES - AKA VALERO CURRENTLY OWNED BY NUSTAR****EPA 01/15/08 Comments:**

Groundwater: COI list change to 1,4 [currently blank]. Change pathway designation to c [currently d] and H,C? [currently blank]

**LWG Discussion:**

ST Services is not included in the JSCS table (it appears to be listed as Valero, in which case, no SCE has been started for the site).

Groundwater: The 2005 Site Summary section 10.2.4 indicates that wells closet to the river had no COIs detected during five consecutive monitoring events in 1995-1197 and "as of 1999, there was not a complete groundwater transport pathway to the river...". The summary also states that "current conditions are unknown." Site Summary Table 1 lists COIs for tank farm as 1,4, but does not indicate a potential pathway. There is no indication in the site summary that an NFA has been issued for the site.

**LWG Recommendations:**

Groundwater: Five quarters of data showing that there isn't a complete pathway to the river should be adequate demonstration, even if there isn't any "current" data. TOC Holdings, Inc. requests that the information for ST Services remain unchanged.

Overwater: Although there were no EPA recommendations to change this pathway, it has been modified to H\*, indicating that the facility had a historic overwater pathway, and there are current overwater operations, but there are no current overwater impacts.

**Joint EPA and DEQ Response:**

Groundwater: EPA and DEQ disagree with the LWG recommendation and maintain EPA's original comment. See general comment 7 regarding the groundwater pathway.

Overwater: EPA and DEQ do not agree with the H\* designation (see Revised Presentation Format comment #3) and acknowledge that the pathway was likely complete historically (H, c). The current pathway would need to be evaluated per EPA's Revised Presentation Format comment #3.

**COMMENT 169 - TIME OIL****EPA 01/15/08 Comments:**

Stormwater/Wastewater: Change pathway designation to H,C? [currently H]

Riverbank Erosion: Change pathway designation to H?,C? [currently H,C]

**LWG Discussion:**

Stormwater/Wastewater: The January 2008 JSCS Milestone report (Table 1) notes that the stormwater SCE is "ongoing" and pathway appears insignificant." The 2007 Site Summary Section 10.2.3 indicates that plume characterization is complete and that site-related groundwater COIs do not exceed JSCS SLVs at the shoreline. Section 10.3.7 states that "direct discharge of impacted groundwater through the storm drain to the river does not represent a current complete pathway."

Riverbank Erosion: The JSCS notes Riverbank Erosion as "NA." The Site Summary (Section 1.2) states that much of the river bank is either covered with vegetation or gravel fill and the beach is relatively wide, so the potential for riverbank erosion is limited. There are no records or evidence of spills from the pipelines along the dock where petroleum products were transferred from ships to the Main Terminal Tank Farm area. Soil samples collected from the wells drilled on the shoreline do not indicate contamination, and no seeps, staining or other visual evidence of contamination has been observed. Soil erosion from the riverbank is therefore considered an unlikely pathway for contaminant migration.

**LWG Recommendations:**

Stormwater/Wastewater: Pathway information should remain unchanged.

Riverbank Erosion: The designation should remain H?

**Joint EPA and DEQ Response:**

Stormwater/Wastewater: EPA and DEQ disagree with the LWG recommendation and maintain EPA's original comment.

Riverbank Erosion: EPA and DEQ disagree with the LWG recommendation and maintain EPA's original comment.

#### **COMMENT 170 - TRIANGLE PARK**

##### **EPA 01/15/08 Comments:**

Groundwater: Change pathway to c [currently a]

Overwater: Change pathway to b [currently c] and H,C? [currently H]

##### **LWG Discussion:**

Groundwater: The January 2008 JSCS Milestone report (Table 1) notes that the groundwater "pathway is complete." The 2005 Site Summary indicates groundwater is impacted at the site but there is that limited information available regarding groundwater flow, gradient and pathways.

Overwater: The JSCS notes that there are no current overwater activities. The Site Summary indicates that there were historical overwater activities but there is no release information.

##### **LWG Recommendations:**

Groundwater: Do not change designation based on DEQ determination which presumably reflects more recent information than the 2005 Site Summary.

Overwater: Leave pathway as 'c' and 'H' due to lack of current activities and known historical activities.

##### **Joint EPA and DEQ Response:**

Groundwater: EPA and DEQ disagree with the LWG recommendation and maintain EPA's original comment.

Overwater: EPA and DEQ do not agree with the H\* designation (see Revised Presentation Format comment #3) and acknowledge that the pathway was likely complete historically (H, b). The current pathway would need to be evaluated per EPA's Revised Presentation Format comment #3.

#### **COMMENT 171 - TRUMBULL ASPHALT PLANT**

Not included in JSCS table. Discussion below based on Site Summary information.

##### **EPA 01/15/08 Comments:**

Stormwater/Wastewater: Change pathway designation to H,C? [currently H]

**LWG Discussion:**

Stormwater/Wastewater: The 2005 Site Summary states that all runoff discharges to COP storm sewer system and that "prior to 1991, wastewater discharge was to municipal stormwater collection system and is potential historic pathway." It also indicates (section 10.3.7) that discharges are currently monitored and no known releases have been reported. Recent DEQ site discovery catch basin data indicate some SLV exceedances of metals, PAHs, and BEHP (See 5/14/08 DEQ Letter re: Catch Basin Sediment Sampling Results and Findings). Stormwater evaluation were to follow per letter agreement request from DEQ.

**LWG Recommendations:**

Stormwater/Wastewater: Change to 'H,C?'

**Joint EPA and DEQ Response:**

Stormwater/Wastewater: EPA and DEQ agree with the LWG recommendation.

**Comment 172 - USACE - Portland Moorings****EPA 01/15/08 Comments:**

Groundwater: COI list change to 1,3,7,10,11 [currently 11]

**LWG Discussion:**

Groundwater: The January 2008 JSCS Milestone report (Table 1) notes that the groundwater SCE is "not started". The 2005 Site Summary Section 1.2 indicates that groundwater samples have not been collected and therefore "insufficient data are available to assess potential contaminant transport." Groundwater COIs were not identified in the Site Summary.

**LWG Recommendations:**

Groundwater: Leave COI as '11' as SCE has not started and COIs were not reported in the Site Summary.

Overwater: Although there were no EPA recommendations to change this pathway, it has been modified to H\*, indicating that the facility had a historic overwater pathway, and there are current overwater operations, but there are no current overwater impacts.

**Joint EPA and DEQ Response:**

Groundwater: EPA and DEQ disagree with the LWG recommendation and maintain EPA's original comment. Recently collected groundwater data at the Portland Moorings site supports this position.

Overwater: EPA and DEQ do not agree with the H\* designation (see Revised Presentation Format comment #3) and acknowledge that the pathway was likely complete historically (H, b). The current pathway would need to be evaluated per EPA's Revised Presentation Format comment #3.

#### **Comment 173 - Van Waters & Rogers**

##### **EPA 01/15/08 Comments:**

Groundwater: Change pathway to d [currently c] and remove H,C

Stormwater/Wastewater: Change pathway to H,C? [currently H]

##### **LWG Discussion:**

Groundwater: The January 2008 JSCS Milestone report (Table 1) notes that the groundwater SCE is "completed" and groundwater is "under control" and that a SVE system is currently operating. The 2005 Site Summary section 1.3 indicates that the shallow VOC plume is contained, but prior to containment there was a potential for a complete pathway. The summary indicates the full extent of the VOC plume in the deep aquifer has not been fully defined (section 10.2.3).

Stormwater/Wastewater: The JSCS notes that the stormwater SCE is "ongoing" and "waiting on SCE to be completed." The 2005 Site Summary section 10.3.7 indicates that stormwater/wastewater is monitored under NPDES permit and concentrations are generally below detection limits. The City commented to EPA on the proposed RCRA Final Remedy (Sept. 22, 2006) and EPA agreed that there was sufficient reason to require a stormwater pathway evaluation. A workplan is currently being developed for the site.

##### **LWG Recommendations:**

Groundwater: Leave pathway as 'c' and update to H,C? from review of Site Summary information.

Stormwater/Wastewater: Change pathway to H,C?.

##### **Joint EPA and DEQ Response:**

Groundwater: EPA and DEQ disagree with the LWG recommendation and maintain EPA's original comment.

Stormwater/Wastewater: EPA and DEQ disagree with the LWG recommendation and maintain EPA's original comment.

## **COMMENT 174 - WILLAMETTE COVE**

### **EPA 01/15/08 Comments:**

Groundwater: Groundwater Historic/Current should be "H, C" [currently C]. Note that the completeness of the groundwater pathway is identified as insufficient data to make a determination (c).

### **LWG Discussion:**

Groundwater: The January 2008 JSCS Milestone report (Table 1) notes that groundwater monitoring has been completed and that the pathway priority is to be determined upon completion of the SCE.

### **LWG Recommendations:**

Groundwater: The SCE is currently underway and no change should be made until it is completed and the results reviewed.

### **Joint EPA and DEQ Response:**

Groundwater: EPA and DEQ disagree with the LWG recommendation and maintain EPA's original comment.

## **Comment 175 – Willbridge Bulk Fuel Facility**

### **EPA 01/15/08 Comments:**

Overwater Discharges should be "H, C?" [currently H].

### **LWG Discussion:**

The January 2008 JSCS Milestone report (Table 1) identifies this pathway as "N/A" and notes "No known current sources (spills reported to OERS)". The Site Summary (September 2004) notes that the "potential exists for direct discharge via releases during petroleum transfer operations at the marine dock for each facility although these releases are rare and involve very small quantities."

### **LWG Recommendations:**

Overwater Discharges: Pathway has been modified to H\*, indicating that the facility had a historic overwater pathway, and there are current overwater operations, but there are no current overwater impacts.



**Joint EPA and DEQ Response:**

Overwater: EPA and DEQ do not agree with the H\* designation (see Revised Presentation Format comment #3) and acknowledge that the pathway was likely complete historically (H, b). The current pathway would need to be evaluated per EPA's Revised Presentation Format comment #3.